Complete Summary

GUIDELINE TITLE

Diagnosis and management of bronchiolitis.

BIBLIOGRAPHIC SOURCE(S)

American Academy of Pediatrics Subcommittee on Diagnosis and Management of Bronchiolitis. Diagnosis and management of bronchiolitis. Pediatrics 2006 Oct;118(4):1774-93. [166 references] PubMed

GUIDELINE STATUS

This is the current release of the guideline.

All clinical practice guidelines from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Bronchiolitis

Note: This guideline does not address long-term sequelae of bronchiolitis, such as recurrent wheezing.

GUIDELINE CATEGORY

Diagnosis
Management

Prevention
Treatment

CLINICAL SPECIALTY

Emergency Medicine
Family Practice
Infectious Diseases
Internal Medicine
Pediatrics
Pulmonary Medicine

INTENDED USERS

Advanced Practice Nurses
Emergency Medical Technicians/Paramedics
Health Care Providers
Nurses
Physician Assistants
Physicians
Respiratory Care Practitioners

GUIDELINE OBJECTIVE(S)

To provide an evidence-based approach to the diagnosis, management and prevention of bronchiolitis in children 1 month to 2 years of age

TARGET POPULATION

Children 1 month to 2 years of age

Note: The guideline does not apply to children with immunodeficiencies including human immunodeficiency virus (HIV), organ or bone marrow transplants, or congenital immunodeficiencies. Children with underlying respiratory illnesses such as chronic neonatal lung disease (CLD; also known as bronchopulmonary dysplasia) and those with significant congenital heart disease are excluded from the sections on management unless otherwise noted but are included in the discussion of prevention.

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Assessment

1. Clinical history
2. Physical examination (e.g. counting respiratory rate)
3. Risk factor assessment, including impact of respiratory symptoms on feeding and hydration
4. Repeated observation
5. Pulse oximetry
6. Chest radiograph (routine radiography is not recommended)
7. Virologic tests for respiratory syncytial virus (RSV)

Note: Diagnostic testing in infants with suspected bronchiolitis (including complete blood count) is not recommended.

Management/Treatment

1. Intravenous fluids (hydration)
2. Supplemental oxygen
3. Palivizumab prophylaxis
4. Inquire about complementary and alternative medicine use
5. Prevention
    - Hand decontamination (alcohol based rubs, handwashing)
    - Personnel and family member education
    - Nonexposure to second hand smoke
    - Breastfeeding

Note: The following interventions were considered but not recommended for routine use:

1. Alpha- or beta-adrenergic bronchodilators
2. Corticosteroid medications
3. Ribavirin
4. Antibiotics (only in children with specific indications of a bacterial infection)
5. Chest physiotherapy
6. Continuous measurement of SpO_2

MAJOR OUTCOMES CONSIDERED

- Effectiveness and relative effectiveness of appropriate diagnostic tools for diagnosing bronchiolitis in infants and children
- Efficacy or effectiveness of pharmaceutical therapies for treating bronchiolitis among infant and children
- Symptom improvement
- Mortality and morbidity
- Hospitalization rate
- Incidence of respiratory syncytial virus infection
- Length of hospitalization
- Cost-effectiveness of prophylactic therapy for prevention of bronchiolitis among infants born from 32 through 35 weeks of estimated gestation age (EGA) and premature infants with comorbidities

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The American Academy of Pediatrics (AAP) and American Academy of Family Physicians (AAFP) partnered with the Agency for Healthcare Research and Quality (AHRQ) and the Research Triangle Institute (RTI) International-University of North Carolina Evidence-Based Practice Center (EPC) to develop an evidence report, which served as a major source of information for these practice guideline recommendations. Specific clinical questions addressed in the AHRQ evidence report were the (1) effectiveness of diagnostic tools for diagnosing bronchiolitis in infants and children, (2) efficacy of pharmaceutical therapies for treatment of bronchiolitis, (3) role of prophylaxis in prevention of bronchiolitis, and (4) cost-effectiveness of prophylaxis for management of bronchiolitis. EPC project staff searched Medline, the Cochrane Collaboration, and the Health Economics Database. Additional articles were identified by review of reference lists of relevant articles and ongoing studies recommended by a technical expert advisory group. To answer the question on diagnosis, both prospective studies and randomized, controlled trials (RCTs) were used. For questions related to treatment and prophylaxis in the AHRQ report, only RCTs were considered. For the cost-effectiveness of prophylaxis, studies that used economic analysis were reviewed. For all studies, key inclusion criteria included outcomes that were both clinically relevant and able to be abstracted.

The investigators set a minimum sample size of 10; small case series and single case reports were excluded. Studies in languages other than English did not meet the admissibility criteria.

Results of the literature review were presented in evidence tables and published in the final evidence report.

An additional literature search of Medline and the Cochrane Database of Systematic Reviews was performed in July 2004 by using search terms submitted by the members of the Subcommittee on the Diagnosis and Management of Bronchiolitis. The methodologic quality of the research was appraised by an epidemiologist before consideration by the subcommittee.

NUMBER OF SOURCE DOCUMENTS

Initially, 744 abstracts were identified for possible inclusion, of which 83 were retained for systematic review.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus
Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Evidence Based Grading Scale

A: Well-designed randomized controlled trials (RCTs) or diagnostic studies on relevant populations

B: RCTs or diagnostic studies with minor limitations; overwhelming consistent evidence from observational studies

C: Observational studies (Case-control and cohort design)

D: Expert opinion, case reports, reasoning from first principles

X: Exceptional situations in which validating studies cannot be performed and there is a clear preponderance of benefit or harm

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

A team of abstractors reviewed and abstracted information on study methodology and results into a data abstraction form. The Study Director entered studies on treatment and prophylaxis into evidence tables. The Scientific Directors reviewed the evidence tables and independently assigned quality scores to each article. When they did not agree, they reviewed the article together and arrived at a consensus. Of the 61 articles that were scored for quality for Key Questions 2 and 3 the Scientific Directors had an initial 98 percent rate of agreement within 1 point. (See *Management of Bronchiolitis in Infants and Children: Summary* [AHRQ Evidence Report/Technology Assessment] listed in the "Availability of Companion Documents" field of this summary.)

A trained abstractor completed a detailed data abstraction form. The Study Director used the forms and the original articles to generate summary evidence tables. The Scientific Directors performed quality control checks through review of the evidence tables against the original articles.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

To develop the clinical practice guideline on the diagnosis and management of bronchiolitis, the American Academy of Pediatrics (AAP) convened the Subcommittee on Diagnosis and Management of Bronchiolitis with the support of the American Academy of Family Physicians (AAFP), the American Thoracic Society, the American College of Chest Physicians, and the European Respiratory Society. The subcommittee was chaired by a primary care pediatrician with expertise in clinical pulmonology and included experts in the fields of general pediatrics, pulmonology, infectious disease, emergency medicine, epidemiology, and medical informatics. The committee partnered with the Agency for Healthcare Research and Quality and the RTI International-University of North Carolina Evidence-Based Practice Center to develop a comprehensive review of the evidence-based literature related to the diagnosis, management, and prevention

of bronchiolitis. The resulting evidence report and other sources of data were used to formulate clinical practice guideline recommendations.

The AAP Policy Statement "Classifying Recommendations for Clinical Practice Guidelines" was followed in designating levels of recommendation.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Levels of Recommendations

Strong recommendation: A strong recommendation in favor of a particular action is made when the anticipated benefits of the recommended intervention clearly exceed the harms (as a strong recommendation against an action is made when the anticipated harms clearly exceed the benefits) and the quality of the supporting evidence is excellent. In some clearly identified circumstances, strong recommendations may be made when high-quality evidence is impossible to obtain and the anticipated benefits strongly outweigh the harms.

Recommendation: A recommendation in favor of a particular action is made when the anticipated benefits exceed the harms but the quality of evidence is not as strong. Again, in some clearly identified circumstances, recommendations may be made when high quality evidence is impossible to obtain but the anticipated benefits outweigh the harms.

Option: Options define courses that may be taken when either the quality of evidence is suspect or carefully performed studies have shown little clear advantage to one approach over another.

No recommendation: No recommendation indicates that there is a lack of pertinent published evidence and that the anticipated balance of benefits and harms is presently unclear.

COST ANALYSIS

Costs of Prophylaxis

Findings from the published literature vary widely, depending on the cost of prophylactic therapy assumed, the hospitalization and other health care costs assumed, the baseline rate of hospitalization for children with respiratory syncytial virus (RSV) bronchiolitis, and reductions in hospitalization rates associated with the use of palivizumab. When all costs are adjusted to 2002 dollars, results from the previous studies suggest that prophylactic therapy for infants from 32 through 35 weeks of estimated gestational age ranges from cost saving—meaning that the expected value of avoided health care utilization is greater than the costs of prophylactic therapy—to an upper bound of over $500,000. Given these variations, evidence is insufficient at the present time to calculate accurate expected incremental costs, or cost per hospitalization avoided, resulting from administration of a prophylaxis in infants who were born 32 through 35 weeks estimated gestational age (EGA) or who are premature with comorbidities.(See "Availability of Companion Documents" field for more cost-effectiveness

information included in the *Management of Bronchiolitis in Infants and Children: Summary* [AHRQ Evidence Report/Technology Assessment].

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

A draft version of this clinical practice guideline underwent extensive peer review by committees and sections within the American Academy of Pediatrics (AAP), American Thoracic Society, European Respiratory Society, American College of Chest Physicians, and American Academy of Family Physicians (AAFP), outside organizations, and other individuals identified by the subcommittee as experts in the field. Members of the subcommittee were invited to distribute the draft to other representatives and committees within their specialty organizations. The resulting comments were reviewed by the subcommittee and, when appropriate, incorporated into the guideline.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The levels of evidence (A-D, X) and the strength of the recommendations (strong recommendation, recommendation, option, or no recommendation) are defined at the end of the "Major Recommendations" field.

Recommendation 1a

Clinicians should diagnose bronchiolitis and assess disease severity on the basis of history and physical examination. Clinicians should not routinely order laboratory and radiologic studies for diagnosis **(recommendation: evidence level B)**.

Recommendation 1b

Clinicians should assess risk factors for severe disease such as age less than 12 weeks, a history of prematurity, underlying cardiopulmonary disease, or immunodeficiency when making decisions about evaluation and management of children with bronchiolitis **(recommendation: evidence level B)**.

Recommendation 2a

Bronchodilators should not be used routinely in the management of bronchiolitis **(recommendation: evidence level B)**.

Recommendation 2b

A carefully monitored trial of alpha-adrenergic or beta-adrenergic medication is an option. Inhaled bronchodilators should be continued only if there is a documented

positive clinical response to the trial using an objective means of evaluation **(option: evidence level B)**.

Recommendation 3

Corticosteroid medications should not be used routinely in the management of bronchiolitis **(recommendation: evidence level B)**.

Recommendation 4

Ribavirin should not be used routinely in children with bronchiolitis **(recommendation: evidence level B)**.

Recommendation 5

Antibacterial medications should be used only in children with bronchiolitis who have specific indications of the coexistence of a bacterial infection. When present, bacterial infection should be treated in the same manner as in the absence of bronchiolitis **(recommendation: evidence level B)**.

Recommendation 6a

Clinicians should assess hydration and ability to take fluids orally **(strong recommendation: evidence level X)**.

Recommendation 6b

Chest physiotherapy should not be used routinely in the management of bronchiolitis **(recommendation: evidence level B)**.

Recommendation 7a

Supplemental oxygen is indicated if oxyhemoglobin saturation (SpO_2) falls persistently below 90% in previously healthy infants. If the SpO_2 does persistently fall below 90%, adequate supplemental oxygen should be used to maintain SpO_2 at or above 90%. Oxygen may be discontinued if SpO_2 is at or above 90% and the infant is feeding well and has minimal respiratory distress **(option: evidence level D)**.

Recommendation 7b

As the child's clinical course improves, continuous measurement of SpO_2 is not routinely needed **(option: evidence level D)**.

Recommendation 7c

Infants with a known history of hemodynamically significant heart or lung disease and premature infants require close monitoring as the oxygen is being weaned **(strong recommendation: evidence level B)**.

Recommendation 8a

Clinicians may administer palivizumab prophylaxis to selected infants and children with chronic lung disease (CLD)or a history of prematurity (less than 35 weeks' gestation) or with congenital heart disease **(recommendation: evidence level A)**.

Recommendation 8b

When given, prophylaxis with palivizumab should be given in 5 monthly doses, usually beginning in November or December, at a dose of 15 mg/kg per dose administered intramuscularly **(recommendation: evidence level C)**.

Recommendation 9a

Hand decontamination is the most important step in preventing nosocomial spread of respiratory syncytial virus (RSV). Hands should be decontaminated before and after direct contact with patients, after contact with inanimate objects in the direct vicinity of the patient, and after removing gloves **(strong recommendation: evidence level B)**.

Recommendation 9b

Alcohol-based rubs are preferred for hand decontamination. An alternative is hand-washing with antimicrobial soap **(recommendation: evidence level B)**.

Recommendation 9c

Clinicians should educate personnel and family members on hand sanitation **(recommendation: evidence level C)**.

Recommendation 10a

Infants should not be exposed to passive smoking **(strong recommendation: evidence level B)**.

Recommendation 10b

Breastfeeding is recommended to decrease a child's risk of having lower respiratory tract disease (LRTD) **(recommendation: evidence level C)**.

Recommendation 11

Clinicians should inquire about use of complementary and alternative medicine (CAM) **(option: evidence level D)**.

Definitions:

Evidence Based Grading Scale

A: Well designed randomized controlled trials (RCTs) or diagnostic studies on relevant populations

B: RCTs or diagnostic studies with minor limitations; overwhelming consistent evidence from observational studies

C: Observational studies (Case-control and cohort design)

D: Expert opinion, case reports, reasoning from first principles

X: Exceptional situations in which validating studies cannot be performed and there is a clear preponderance of benefit or harm

Strength of Recommendations

Strong recommendation: A strong recommendation in favor of a particular action is made when the anticipated benefits of the recommended intervention clearly exceed the harms (as a strong recommendation against an action is made when the anticipated harms clearly exceed the benefits) and the quality of the supporting evidence is excellent. In some clearly identified circumstances, strong recommendations may be made when high-quality evidence is impossible to obtain and the anticipated benefits strongly outweigh the harms.

Recommendation: A recommendation in favor of a particular action is made when the anticipated benefits exceed the harms but the quality of evidence is not as strong. Again, in some clearly identified circumstances, recommendations may be made when high quality evidence is impossible to obtain but the anticipated benefits outweigh the harms.

Option: Options define courses that may be taken when either the quality of evidence is suspect or carefully performed studies have shown little clear advantage to one approach over another.

No recommendation: No recommendation indicates that there is a lack of pertinent published evidence and that the anticipated balance of benefits and harms is presently unclear.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

Evidence Profile 1a: Diagnosis

- Aggregate evidence quality: B; diagnostic studies with minor limitations and observational studies with consistent findings
- Benefit: cost saving, limitation of radiation and blood tests

- Harm: risk of misdiagnosis
- Benefits-harms assessment: preponderance of benefit over harm
- Policy level: recommendation

Evidence Profile 1b: Risk Factors

- Aggregate evidence quality: B; observational studies with consistent findings
- Benefit: improved care of patients with risk factors for severe disease
- Harm: increased costs, increased radiation and blood testing
- Benefits-harms assessment: preponderance of benefit over harm
- Policy level: recommendation

Evidence Profile 2a: Routine Use of Bronchodilators

- Aggregate evidence quality: B; randomized controlled trials (RCTs) with limitations
- Benefit: short-term improvement in clinical symptoms
- Harm: adverse effects, cost of medications, cost to administer
- Benefits-harms assessment: preponderance of harm over benefit
- Policy level: recommendation

Evidence Profile 2b: Trial of Bronchodilators

- Aggregate evidence quality: B; RCTs with limitations
- Benefit: some patients with significant symptomatic improvement
- Harm: adverse effects, cost of medications, cost to administer
- Benefits-harms assessment: preponderance of benefit over harm in select patients
- Policy level: option

Evidence Profile 3: Corticosteroids

- Aggregate evidence quality: B; randomized clinical trials with limitations
- Benefit: possibility that corticosteroid may be of some benefit
- Harm: exposure to unnecessary medication
- Benefits-harms assessment: preponderance of harm over benefit
- Policy level: recommendation

Evidence Profile 4: Ribavirin

- Aggregate evidence quality: B; RCTs with limitations and observational studies
- Benefit: some improvement in outcome
- Harm: cost, delivery method, potential health risks to caregivers
- Benefits-harms assessment: preponderance of harm over benefit
- Policy level: recommendation

Evidence Profile 5: Antibacterial Therapy

- Aggregate evidence quality: B; RCTs and observational studies with consistent results

- Benefit: appropriate treatment of bacterial infections, decreased exposure to unnecessary medications and their adverse effects when a bacterial infection is not present, decreased risk of development of resistant bacteria
- Harm: potential to not treat patient with bacterial infection
- Benefits-harms assessment: preponderance of benefit over harm
- Policy level: recommendation

Evidence Profile 6a: Fluids

- Aggregate evidence quality: evidence level X; validating studies cannot be performed
- Benefit: prevention of dehydration
- Harm: overhydration, especially if syndrome of inappropriate secretion of antidiuretic hormone (SIADH) is present
- Benefits-harms assessment: clear preponderance of benefit over harm
- Policy level: strong recommendation

Evidence Profile 6b: Chest Physiotherapy

- Aggregate evidence quality: B; RCTs with limitations
- Benefit: clearance of secretions, prevention of atelectasis
- Harm: stress to infant during procedure, cost of administering chest physiotherapy
- Benefits-harms assessment: preponderance of harm over benefit
- Policy level: recommendation

Evidence Profile 7a: Supplemental Oxygen

- Aggregate evidence quality: D; expert opinion and reasoning from first principles
- Benefit: use of supplemental oxygen only when beneficial, shorter hospitalization
- Harm: inadequate oxygenation
- Benefits-harms assessment: some benefit over harm
- Policy level: option

Evidence Profile 7b: Measurement of SpO2

- Aggregate evidence quality: D; expert opinion
- Benefit: shorter hospitalization
- Harm: inadequate oxygenation between measurements
- Benefits-harms assessment: some benefit over harm
- Policy level: option

Evidence Profile 7c: High-Risk Infants

- Aggregate evidence quality: B; observational studies with consistent findings
- Benefit: improved care of high-risk infants
- Harm: longer hospitalization, use of oxygen when not beneficial
- Benefits-harms assessment: preponderance of benefit over harm
- Policy level: Strong recommendation

Evidence Profile 8a: Palivizumab Prophylaxis

- Aggregate evidence quality: A; RCTs
- Benefit: prevention of morbidity and mortality in high-risk infants
- Harm: cost
- Benefits-harms assessment: preponderance of benefit over harm
- Policy level: recommendation

Evidence Profile 8b: Five-Dose Regimen

- Aggregate evidence quality: C; observational studies and expert opinion
- Benefit: decreased cost resulting from using minimal number of needed doses
- Harm: risk of illness from respiratory syncytial virus (RSV) outside the usual season
- Benefits-harms assessment: preponderance of benefit over harm
- Policy level: recommendation

Evidence Profile 9a: Hand Decontamination

- Aggregate evidence quality: B; observational studies with consistent findings
- Benefit: decreased spread of infection
- Harm: time
- Benefits-harms assessment: strong preponderance of benefit over harm
- Policy level: strong recommendation

Evidence Profile 9b: Alcohol-Based Rubs

- Aggregate evidence quality: B; observational studies with consistent findings
- Benefit: decreased spread of infection
- Harm: irritative effect of alcohol-based rubs
- Benefits-harms assessment: preponderance of benefit over harm
- Policy level: recommendation

Evidence Profile 9c: Education

- Aggregate evidence quality: C; observational studies
- Benefit: decreased spread of infection
- Harm: time, cost of gloves and gowns if used, barriers to parental contact with patient
- Benefits-harms assessment: preponderance of benefit over harm
- Policy level: recommendation

Evidence Profile 10a: Secondhand Smoke

- Aggregate evidence quality: B; observational studies with consistent findings
- Benefit: decreased risk of lower respiratory tract infection (LRTI)
- Harm: none
- Benefits-harms assessment: strong preponderance of benefit over harm
- Policy level: strong recommendation

Evidence Profile 10b: Breastfeeding

- Aggregate evidence quality: C; observational studies
- Benefit: improved immunity, decreased risk of LRTI, improved nutrition
- Harm: implied inadequacy of mothers who cannot or prefer to not breastfeed
- Benefits-harms assessment: preponderance of benefit over harm
- Policy level: recommendation

Evidence Profile 11: Asking About complimentary alternative medicine (CAM)

- Aggregate evidence quality: D; expert opinion
- Benefit: improved parent-physician communication, awareness of other, possibly harmful treatments being used
- Harm: time required for discussion, lack of knowledge about CAM by many pediatricians
- Benefits-harms assessment: some benefit over harm
- Policy level: option

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Improved diagnosis, treatment, management and prevention of bronchiolitis in infants and children

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- This clinical practice guideline is not intended as a sole source of guidance in the management of children with bronchiolitis. Rather, it is intended to assist clinicians in decision-making. It is not intended to replace clinical judgment or establish a protocol for the care of all children with this condition. These recommendations may not provide the only appropriate approach to the management of children with bronchiolitis.
- The recommendations in this guideline do not indicate an exclusive course of treatment or serve as a standard of care. Variations, taking into account individual circumstances, may be appropriate.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

American Academy of Pediatrics Subcommittee on Diagnosis and Management of Bronchiolitis. Diagnosis and management of bronchiolitis. Pediatrics 2006 Oct;118(4):1774-93. [166 references] PubMed

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2006 Oct

GUIDELINE DEVELOPER(S)

American Academy of Pediatrics - Medical Specialty Society

SOURCE(S) OF FUNDING

American Academy of Pediatrics

GUIDELINE COMMITTEE

Subcommittee on Diagnosis and Management of Bronchiolitis

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Subcommittee on the Diagnosis and Management of Bronchiolitis, 2004 to 2006: Allan S. Lieberthal, MD, *Chairperson*; Howard Bauchner, MD; Caroline B. Hall, MD; David W. Johnson, MD; Uma Kotagal, MD; Michael J. Light, MD (on the AstraZeneca and MedImmune speakers' bureaus; research grant from MedImmune); Wilbert Mason, MD (on the MedImmune speakers' bureau); H. Cody Meissner, MD; Kieran J. Phelan, MD; Joseph J. Zorc, MD

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

All panel members reviewed the American Academy of Pediatrics (AAP) Policy on Conflict of Interest and Voluntary Disclosure and were given an opportunity to declare any potential conflicts.

GUIDELINE STATUS

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GUIDELINE AVAILABILITY

Electronic copies: Available from the American Academy of Pediatrics (AAP) Policy Web site.

Print copies: Available from American Academy of Pediatrics, 141 Northwest Point Blvd., P.O. Box 927, Elk Grove Village, IL 60009-0927.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Management of bronchiolitis in infants and children. Summary. 2003 Jan. 6 p. AHRQ Evidence Report/Technology Assessment No. 69. Electronic copies: Available from the Agency for Healthcare Research and Quality Web site.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on December 15, 2006. The information was verified by the guideline developer on December 22, 2006.

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